



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,061	05/31/2001	Kouichi Matsumura	MTS-3262US	8967

7590 11/20/2003

RATNER AND PRESTIA  
Suite 301  
One Westlakes, Berwyn  
P.O. Box 980  
Valley Forge, PA 19482-0980

EXAMINER
----------

LU, KUEN S

ART UNIT	PAPER NUMBER
----------	--------------

2177

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/871,061

Applicant(s)

MATSUMURA ET AL.

Examiner

Kuen S Lu

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## ***DETAILED ACTION***

### ***Specification***

#### ***Abstract***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

1. The abstract of the disclosure is objected to because it contains "means" and recites some claims language. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2177

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knee et al. (U.S. Patent 6014184, hereafter "Knee") and in view of Cragun et al. (U.S. Patent 5,859,662, hereafter "Cragun").

As per claims 1, 2 and 16, Knee teaches the following:

Retrieval means and step of "obtaining program information of a program" at col. 9, lines 61-65 by receiving information about programs or services;

Matching means and step of "matching said obtained program information with a predetermined user channel number" at col. 16, lines 37-41 by displaying airing time, service indicator and channel number of a particular show, and identifying event and channel being currently broadcast at col. 6, lines 51-57; and

Input means and step of "receiving directions from a user" at col. 6, lines 14-18 by utilizing a user control apparatus to choose user control commands and transmit signals in response to data processor;

Control means and step of controlling or tuning a video receiver at col. 6, lines 25-32 by using data processor to control the video display generator with video control commands, issued in response to the user control commands.

Knee does not teach means or step for inputting keywords or obtaining program information of a program relating to keyword input.

However, Cragun teaches inputting keywords at col. 2, lines 46-47 by allowing television viewer to input to the presentation system one or more keyword to be used as search parameters.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Cragun's teaching into Knee's by using keypad or keyboard to input keywords for searching and matching program information because by doing so users of Knee's system could avoid scanning a huge list of program information for finding program schedule or playing a sports event in real-time. The combination would make Knee's system a subscription server to provide services to a much wider audience.

As per claims 3/1 and 3/2, Knee teaches "obtained program information includes at least broadcast channel number, broadcast start time and broadcast end time" at col. 17, lines 6-7 by providing users with reminder message containing the channel, service and start time.

As per claims 4/1 and 4/2, Knee does not teach "retrieves program information to obtain a program relating to said keyword".

However, Cragun teaches retrieving information related to keywords at col. 16, lines 27-31 and 39-41 by identifying the video segment and displaying to the viewer.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Cragun's teaching into Knee's by using keywords to search program information because by doing so Knee's system could become a subscription server such that users could subscribe programs by obtaining program information with a few key strokes, instead of scanning a huge program listing.

As per claims 5/1, 5/2 and 17, Knee teaches program information server storing program information at col. 10, lines 36-40 by downloading program schedule information to a storage device;

“retrieves program information of a program” at col. 15, lines 7-12 by flipping through the channels and receiving program schedule information; and “obtains said program information retrieved by said program information server” at col. 13, lines 41-44 by retrieving messages, images or programs from storage of the system.

Knee does not teach transmitting keyword and using keyword for retrieving program information.

However, Cragun teaches retrieving program information at col. 16, lines 27-31 and 39-41 by identifying the video segment and displaying to the viewer.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Cragun's teaching into Knee's by increasing the capacity for storing program information and program itself and further using keywords to retrieve program information because by doing so users of Knee's system could obtain program information promptly and make Knee's system a fully functional subscribing server for multi-media.

As per claims 6/5/1, 6/5/2 and 18, Knee teaches “comprising video recording medium control means of operating a recording medium for recording video information, wherein when programs matched with said predetermined user channel number are broadcast on plural broadcast channels” at col. 36, lines 51-55 by configuring EPG to store unique digital identifier for program and use it to transmit identified program for video recorder by automatically controlling the recorder's operation; and  
“video recording medium control means records programs other than at least either one of the programs on said video recording medium, and when a direction is received from said

direction input means in a time period during which there is no program matched with said re-determined user channel number, said video recording medium control means reproduces said programs recorded on said video recording media" at col. 36, lines 51-55 by transmitting a unique identifier to video recorder for automatically controlling the recorder's operation and at col. 32, lines 45-49 by using virtual channels.

As per claims 7/5/1 and 7/5/2, although Knee teaches network architecture for the epg system and programs at col. 9, lines 52-60, Knee does not teaches "input means inputs said keywords from a keyword server connected to said network and used to transmit said keywords".

However, Cragun teaches inputting keywords by using keyboards at col. 2, lines 46-47 and col. 4, lines 59-64.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Cragun's teaching into Knee's by using keyboard to input keywords which can not function by itself and must connect to a system because by doing so users of Knee's system would be able to conveniently and flexibly search and retrieve programs from network connection.

As per claims 8/7/5/1 and 8/7/5/2, Knee does not teach "plural keywords are obtained from said keyword server, and said keywords to be input are those selected from among said plural keywords".

However, Cragun teaches inputting keywords by using keyboards at col. 2, lines 46-47 and col. 4, lines 59-64.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Cragun's teaching into Knee's by using keyboard to input multiple keywords by doing so users of Knee's system would be able to search a complex title of program by simply inputting a few key words, for example, a phrase consisting of a few words such as "Marlins, Yankees, 9 PM" would be able to retrieve the baseball game playing at 9 PM.

As per claims 9/5/1 and 9/5/2, Knee teaches program information change monitoring means for carrying out monitoring as to whether program information stored in said program information server is renewed or not, wherein when said program information change monitoring means detects that the program information stored in said program information server is renewed after the time when said retrieval means last obtained program information of a program at col. 47, lines 1-10 by extracting and displaying updated program information, and renewing program information on the basis of the result of detection by adding application software to update program guide at the user's site at col. 10, lines 14-17

As per claims 10/5/1 and 10/5/2, Knee teaches "detection is carried out by making inquiries to said program information server at predetermined time intervals as to the renewal time of said program information stored in said program information server" at col. 36, lines 14-17 by scheduling the display of background views on which program schedule information is overlaid.

As per claims 11/5/1 and 11/5/2, Knee teaches holding means of holding area information for specifying an area wherein said receiving control device itself is installed, wherein when transmitting said input keywords to said program information server, said retrieval means also



transmits said area information to said program information server, and said program information server carries out retrieval in consideration of said transmitted area information at Figs. 5, col. 7, lines 9-11 by shows an overlay appearing on a television screen in one mode of operation of the preferred embodiment of the present invention.

As per claims 12/1 and 12/2, Knee teaches a program information display means of displaying program information, wherein said program information display means displays said program information in a table format or said remote controller channel numbers corresponding to said keywords, time information, program titles, one of the ordinate and the abscissa of said format represents said keywords or said remote controller channel numbers corresponding to said keywords, and the other represents time information at Figs. 49, 50 and 51, col. 43, lines 52-54 by display tabular information of games.

As per claims 13/7/5/1 and 13/7/5/2, Knee does not teach "program information server has the function of said keyword server".

However, Cragun teaches retrieving program information related to keywords at col. 16, lines 27-31 and 39-41.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Cragun's teaching into Knee's by implementing keyword function in the program information server because by doing so the program information server function of Knee's system would be complete since the keyword input and program information search could be performed on the same system.

As per claims 14/1 and 14/2, Knee teaches "medium having programs and/or data for activating all or part of functions of all or part of means of said receiving control device in

Art Unit: 2177

accordance with any one of claims 1 to 2 on a computer, wherein said medium can be processed by a computer" at Fig. 1, col. 9, line 51-60.

As per claims 15/1 and 15/2, Knee teaches "information aggregate characterized by programs and/or data for activating all or part of functions of all or part of means of said receiving control device" at Figs. 36 A-D, col. 8, lines 45-47.

### ***Conclusion***

The prior art made of record

A. U.S. Patent No. 6014184

B. U.S. Patent 5859662

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

C. U.S. Pub. No. 2002/0126219

D. U.S. Pub. No. 2003/0048364

E. U.S. Patent No. 6248946

F. U.S. Patent No. 6412111

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is 703-305-4894.

The examiner can normally be reached on 8 AM to 5 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


Art Unit: 2177

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

KL

Patent Examiner

November 14, 2003

  
JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100